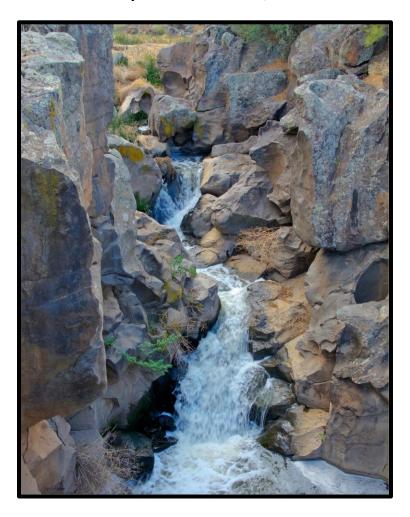
# Picture Canyon Natural & Cultural Preserve Management Plan

Adopted October 6th, 2015



Waterfall at Picture Canyon © Tom Bean

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## **Executive Summary**

The City of Flagstaff acquired the 478 acre Picture Canyon Natural and Cultural Preserve in October 2012 with funding from the 2004 voter-approved Open Space bond and a 2012 Growing Smarter Grant through Arizona State Parks. Picture Canyon is an important cultural site in the Flagstaff region, given that it was inhabited by the northern Sinagua for nearly 600 years. Approximately 100 separate petroglyph panels and nearly 800 individual petroglyph images are pecked into the Canyon's walls and basalt boulders. Additionally, due to Picture Canyon's location within City limits and proximity to multiple neighborhoods, the Preserve serves as a popular recreation area and a "neighborwoods" for local residents. As landowners, it is imperative that the City of Flagstaff manage the Preserve in a way that does not materially degrade any of the natural or cultural resources present.

City of Flagstaff Staff worked with many community partners to develop the management plan and ensure it is accurate, timely, and contains the best management practices. Representatives from Arizona Game and Fish Department, Flagstaff Fire Department, Coconino National Forest, Museum of Northern Arizona, Coconino County, State Historic Preservation Office, Arizona State Parks, Arizona State Museum, and affiliated tribal liaisons were involved in developing this management plan.

This management plan provides an overall framework to sustainably manage Picture Canyon's natural, archaeological, ecological, and recreational resources to minimize conflict. This plan identifies management objectives, policies, and actions to be considered in the management of Picture Canyon Natural and Cultural Preserve.

**Overall Management Goals:** The Picture Canyon Management Plan includes a number of specific resource-related objectives, policies, and management activities. However, there are 5 overall management goals that will guide management of the Preserve. These goals are:

- 1. To protect all cultural resources present within the Preserve.
- 2. To maintain, protect, and restore watershed health within the Preserve, including the Rio de Flag and associated wetland and riparian zones.
- 3. To maintain and protect diverse and healthy wildlife populations within the Preserve.
- 4. To provide opportunities for public use of the Preserve through passive recreational use, resource interpretation, education, scientific research, and other compatible activities in a manner that is consistent with the preservation of the conservation values of the site and the management goals.
- 5. To maintain and develop partnerships that facilitate resource management and protection within the Preserve.

The management prescriptions included herein apply to all lands within the Picture Canyon Natural and Cultural Preserve as of the date of plan adoption. These management principles can also be applied to any additional adjacent lands acquired and incorporated into the Preserve.

**Plan Organization:** The Picture Canyon Management Plan is organized into 5 core sections to address the resources, uses, and values of the Preserve.

## **Section One: Management Coordination**

This section outlines the working relationship between the various stakeholders involved in the management of the Preserve and the roles associated with each of those groups.

#### **Section Two: Natural Resources**

This section outlines objectives, policies, and planned actions related to the protection of the Preserve's natural resources, including water, vegetation, and wildlife resources.

## **Section Three: Cultural Resources**

This section outlines policies that will be implemented to protect the archaeological and cultural resources present at the Preserve.

## **Section Four: Public Use and Facility Development**

This section outlines public uses that will be allowed within the Preserve as well as the accompanying facilities needed to support those uses.

### **Section Five: Priority Action Plan**

This section outlines maintenance and management actions that will be implemented in the initial two-year period following adoption of this plan.

## 1.0 Internal Management Coordination

**Introduction:** The day-to-day operations of the Preserve are coordinated by City of Flagstaff staff and supported by: (1) an internal City workforce; (2) the Picture Canyon Working Group; (3) the City of Flagstaff Open Spaces Commission; (4) the Flagstaff Police Department; (5) the Flagstaff Fire Department; (6) the Coconino County Sheriff's Office; (7) the Summit Fire Department; and (8) volunteers.

**Staffing:** City staff will oversee all Preserve operations pertaining to but not limited to: (1) forest health; (2) policy enforcement; (3) volunteer efforts; (4) permitting; (5) resource management; and (6) facility development. The Preserve staff will include:

Open Space Specialist: The Open Space Specialist will provide resource management in accordance with the conservation values and regulatory requirements of the Picture Canyon Natural & Cultural Preserve. The Open Space Specialist oversees, and directly implements or facilitates all management activities within the Preserve, including budgeting, planning, implementing, reporting, and monitoring. The Open Space Specialist coordinates with Parks, Real Estate, and community partners to establish property boundaries, install fencing, decommission existing roads, restore native vegetation, and provide signs throughout the Preserve. The Open Space Specialist also manages Preserve volunteer activities, such as invasive weed removal projects, community cleanups, and trail days, as well as coordinates community marketing, outreach, and education efforts. The Open Space Specialist position is housed in the Sustainability Program within the City of Flagstaff's Public Works Department.

The responsibilities of the individuals, organizations, and/or agencies involved in the management of the Preserve will be as follows:

City of Flagstaff Open Space Commission: The Open Space Commission consists of nine voting members — seven Council-appointed members and a representative from the Planning and Zoning Commission as well as the Parks and Recreation Commission. The Commission serves as an advisory body on the acquisition, management, use, restoration, enhancement, protection, and conservation of open space land. The Open Space Commission will provide guidance to the Open Space Specialist regarding the management of the Preserve.

City of Flagstaff Heritage Preservation Commission: The Heritage Preservation Commission consists of seven members appointed by the City Council and includes technical professionals, historic property owners, and members of the general public. The Commission, and sometimes the Historic Preservation Officer, is formally responsible for the treatment of cultural and historic resources in Flagstaff, including impact mitigation measures, and is also responsible for determining the appropriateness of any proposed improvements within the Landmarks Overlay District (which includes Picture Canyon).

**Picture Canyon Working Group:** The Picture Canyon Working Group (PCWG) meets monthly and consists of representatives from across the community with a clear and immediate interest in land use and management at Picture Canyon. The Picture Canyon Working Group assists the City of Flagstaff with the following goals:

- 1. Maintain a functional stakeholder's group for collective, mutually acceptable, long-range management for the lands in the Greater Picture Canyon area.
- 2. Create a forum to coordinate the management activities of the individual stakeholders to achieve collective management outcomes.
- 3. Create a platform from which joint ventures and partnerships can be launched.

The mission of PCWG is to actively provide stewardship and technical assistance in support of the long term management of the Picture Canyon Natural and Cultural Preserve. The vision of the PCWG is to support the long-term conservation of Picture Canyon. PCWG participants include representatives from federal, state, and local governments and agencies, nonprofits, educational institutions, individuals, businesses, and local community organizations.

The goals of the PCWG include:

- 1. Support and enhance educational, recreational, and interpretive facilities.
- 2. Provide public outreach and programming that promotes an understanding of the natural and cultural history of Picture Canyon.
- 3. Support and advocate for the cultural and ecological health of the Preserve.
- 4. Provide technical assistance on topics including natural resources, archaeological and cultural resources, and public use and facility development.

**Arizona State Parks:** As the recipient of an Arizona State Parks Growing Smarter Grant, the City of Flagstaff has conveyed a conservation easement to Arizona State Parks that allows for passive recreation and requires reasonable public access.

**Arizona Trail Association:** The Arizona Trail Association operates a trail steward program and will continue to be the official stewards of the section of the Arizona Trail that travels through the Preserve. Arizona Trail stewards regularly monitor and maintain their trail segments.

City of Flagstaff Internal Task Force: The Internal City Task Force will consist of members from City departments including: (1) Sustainability; (2) Fire; (3) Police; (4) Utilities; (5) Parks; (6) Recreation; (7) Planning; and (8) Risk Management. This Task Force will meet quarterly to discuss issues related to the management of the Preserve.

**Flagstaff Police Department:** The Flagstaff Police Department will provide police assistance on the Preserve lands located within the City of Flagstaff.

**Flagstaff Fire Department:** The Flagstaff Fire Department will provide fire and emergency assistance on the Preserve lands located within the City of Flagstaff.

**Coconino County Sheriff's Office:** The Coconino County Sheriff's Office will provide police assistance in partnership with the Flagstaff Police Department.

**Summit Fire Department:** The Summit Fire Department will provide fire and emergency assistance in partnership with the Flagstaff Fire Department.

**Volunteers:** Volunteers will be utilized when appropriate. Tasks assigned to volunteers will be consistent with the skills and expertise of the individual and may include activities ranging from coordination of interpretive programs to trail maintenance.

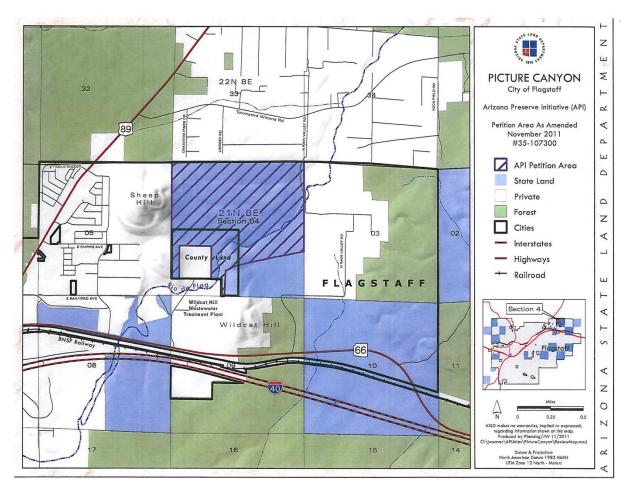


Figure 1: Picture Canyon Preserve location and vicinity map. The City owns the entire 478 "API Petition Area" indicated above, but there is a County island within the Preserve.

## 2.0 Natural Resources

**Introduction:** Central to the overall management of Picture Canyon will be the effective management of its natural resources. The water, wildlife, vegetation and geologic resources are important factors that supported the acquisition of the property and the establishment of the Preserve. To ensure the protection of the biological, physical, and visual resources, specific management objectives, policies, and planned management actions have been identified. These plan elements are outlined in this section of the Management Plan.

## 2.1 Water Resources

**Management Objective:** The Preserve will be managed to maintain or improve surface and ground water quality, surface water flow, and ground water levels within the Rio de Flag to sustain watershed health including the wetlands and riparian zone.

Summary of Current Conditions: Flowing in a northerly and northeasterly direction, the Rio de Flag is a water feature that meanders through Picture Canyon providing nearly five acres of healthy riparian and wetland habitat for plants and animals as well as important ecological services, including pollutant filtration (Image 1-A). A 20-year water right agreement between Arizona Game and Fish and the City of Flagstaff ensures an ongoing supply of water is released into the Rio de Flag immediately upstream from Picture Canyon as long as the agreement is active.

**Policies:** The following policies apply to the management of water resources.

- The City of Flagstaff will maintain the right to surface and ground water resources present within the existing Preserve and within additional lands that may be added to the site in the future.
- Activities and/or uses that materially diminish the quality, quantity, or duration of flow of surface or ground water will not be permitted.
- The City of Flagstaff will be an active participant in efforts to protect and enhance the surface and ground water resources associated with the overall Picture Canyon watershed.
- Water elevations and vegetation within the pond should be managed to sustain
  a healthy habitat mix of open water with a vegetated margin. Prolonged periods
  of low water in the pond will allow emergent vegetation to invade the deeper
  portions of the pond and degrade open water habitat. Mechanical manipulation
  of the vegetation may be required to achieve this goal over the long term.

**Planned Management Actions:** The following actions related to the management of water resources are planned.

- Continued release of water from the Flagstaff Wildcat Wastewater Treatment Plant in accordance with the requirements of the agreement between the City of Flagstaff and Arizona Game & Fish Department that provides a weekly average of 100 gallons per minute of Class A reclaimed water based on a weekly hourly average.
- Cooperation with the Arizona Department of Environmental Quality (ADEQ) and City of Flagstaff Utilities related to the monitoring of surface and ground water quality within the Preserve.

## 2.2 Vegetative Resources

**Management Objective:** The Preserve will be managed to protect and enhance the native plant communities present on the site.

**Summary of Current Conditions:** Picture Canyon contains a riparian corridor that displays hanging gardens of Arizona grape and a stream edge of smartweed. Beyond the stream edge are clusters of mature oak trees and ponderosa pine trees. Along the shaded cliffs are colonies of Arizona walnut trees. The Preserve is home to banana yucca, apache plume, piñon, wolfberry, and cliff rose. Forest openings reveal grama grass, penstemon, Indian paintbrush, buckwheat, wax currant, and Wheeler's thistle.

**Policies:** The following policies apply to the management of vegetative resources.

- Upon the expiration of the existing Arizona State Land Department grazing lease on December 17, 2014, livestock grazing within the Preserve will be prohibited.
- Public use of the Preserve will be restricted to levels that do not materially degrade or alter the site's vegetative resources. Public use will be consistent with reasonable public access, as outlined by the Arizona State Parks conservation easement. If public access restrictions are undertaken to ensure vegetative health, Arizona State Parks will be notified.

#### **Planned Management Actions:**

- Utilize volunteer groups to conduct vegetation inventory surveys on an ongoing basis.
- Re-establish and maintain cottonwood/willow and rush/sedge vegetation communities along the stream channel to increase habitat availability for birds.

- Use photography as an analytical tool from established photo monitoring points to determine the nature and extent of vegetative changes resulting from the management prescriptions and programs being implemented.
- Implement native plant restoration programs or pilot projects utilizing the City of Flagstaff's resources or the resources of cooperating agencies and organizations.
- Maintain consultation with representatives of affiliated tribes regarding plant resources and restoration efforts.



Figure 2: After stream meander restoration. © Tom Bean

## 2.3 Forest Health

**Management Objective:** The Preserve will be managed to achieve a Desired Future Condition (DFC) of our forest that enhances community well-being by:

- Protecting the community from catastrophic wildfire and post-fire impacts by reducing fire hazard and quickly mitigating post-fire effects.
- Ensuring forest sustainability by improving individual tree vigor and long-term forest health.
- Maintaining or enhancing the unique archaeological values, aesthetic qualities, recreational opportunities, watershed values, wildlife habitat, native plant diversity, and other features of the Preserve.
- As much as possible, maintain a full and natural range of tree age and density.

Summary of Current Conditions: Results from a study in the Ft. Valley area north of Flagstaff (Figure 3), shows that ponderosa pine increased from 22.8 trees per acre in 1876 to 1,253.5 trees per acre in 1992 (Covington et al. 1994). These conditions are comparable to the conditions at the Preserve, which has experienced parallel land use and history. This influx of small diameter trees from several dominant cohorts has produced a continuous canopy cover at the time of plan adoption. In 1876, 19% of the surface area was under pine canopy, with the balance (81%) representing grassy openings. In 1992, pine canopy covered 93% of the area with only 7% left in grassy openings. Some areas in the region have seen a much greater increase in the number of small pines than depicted in this single study. That range is largely due to differences in site condition. Canopy cover greatly affects under-story plant diversity and water run-off.

	Trees	Trees		
DBH	per	per	BA per	BA per
class	acre	acre	acre	acre
(in)	1876	1992	1876	1992
0-4	0.9	945	0.0	20.6
4-8	2.6	243	0.5	47.7
8-12	2.8	46	1.5	25.1
12-16	3.6	6.7	3.8	7.2
16-20	5.1	1.6	9.0	2.8
20-24	3.7	2.5	9.8	6.6
24-28	3.2	2.4	11.8	8.8
28-32	1.2	4.1	5.9	20.1
32-36	0.4	1.7	2.5	10.7
36-40	0.6	0.3	4.7	2.4
40-44	0.3	0.2	2.9	1.9
Total	24.6	1253.5	52.5	154.0

Figure 3: Data extrapolated from a study in the Ft. Valley area illustrating the change in ponderosa pine trees per acre and basal (1876 to 1992).

**Policies:** The following policies apply to the management and facilitation of forest health.

- Public use of the Preserve will be restricted to levels that do not materially degrade or alter the site's forest resources. Public use will be consistent with reasonable public access, as outlined by the Arizona State Parks conservation easement. If public access restrictions are undertaken to ensure forest health, Arizona State Parks will be notified.
- The risk of damage from insects and disease, unnaturally destructive wildfire, and subsequent post fire impacts such as flooding will be reduced.

- Forest health management activities will be planned and implemented by the Flagstaff Fire Department Wildland Fire Management division. The Flagstaff Fire Department will coordinate with the Open Space Specialist and notify that person when activities begin.
- The Flagstaff Fire Department will refrain from damaging known and identified archaeological resources during forest health management activities.

## **Planned Management Actions:**

- The Flagstaff Fire Department, in consultation with other technical experts as they deem necessary, will develop site specific prescriptions to reduce the risk of catastrophic wildfire and move stand conditions toward the natural range of variability along a path of forest restoration.
- As far as possible, maintain near natural densities of snags, spike tops, lightning scarred trees, downed logs, and oaks.
- Management activities will be implemented to create a tree group forest structure with clumps and groups of trees with some interlocking crowns and a multi-story structure, interspersed with openings and interspaces that more closely resembles conditions which existed prior to interruption of the historic fire regime.
- Trees targeted for removal will be those which show signs of poor vigor, are suppressed or are suppressing otherwise healthy trees, are themselves damaged, deformed, diseased or create a ladder fuel effect into the overstory canopy, are invasive species, or are damaging, or threaten to damage, archeological resources. The value of these trees as wildlife habitat will be taken into account during planned treatments.
- Forest Management activities will be conducted in accordance with:
  - 1. Applicable sections of the Flagstaff Zoning Code, adopted by City Council November 1, 2011, including the Flagstaff Fire Department Firewise Process (Appendix 5.020)
  - 2. Goals identified in the National Cohesive Wildland Fire Management Strategy:
    - a. Resilient Landscapes
    - b. Fire Adapted Communities

## c. Wildfire Response

- 3. The Greater Flagstaff Community Wildfire Protection Plan (CWPP), adopted by City Council December 2004;
- 4. The Governor's Statewide Strategy for Restoring Arizona's Forests, June 2007:
- 5. Flagstaff Wildland Urban Interface Fire Code, adopted by City Council April 2008;
- 6. The General City-wide Forest Stewardship Plan, Sept 2009;
- 7. The Community Conversation on Sustainability, Healthy Forests Healthy Communities, Nov 2010; and
- 8. Site specific vegetation management plan(s), if required.
- Establishment of natural regeneration may be permitted in openings, so long as
  doing so does not disrupt natural site diversity, increase fire threat, or
  threaten/eliminate unique aspects of the Preserve.
- With advance approval from the Open Space Specialist as required by the Arizona State Parks conservation easement, broadcast burning may occur to reduce surface fuel levels, accelerate recycling of nutrients, foster native grass and shrub development, and as the primary tool to maintain forest structure. Where possible, this should be repeated approximately every 3 - 10 years to mimic natural conditions and historic fire return intervals in the region.
  - 1. Flagstaff Fire Department must consult with an Arizona Antiquities Actpermitted archaeological consultant prior to broadcast burning operations.
  - 2. In dense cultural resource areas, hand thinning will be the primary mechanism for treatment to reduce impacts. However, mechanized treatment techniques may be utilized in sparse cultural resource areas.
  - 3. Any and all broadcast burning will be planned, coordinated and implemented by the Flagstaff Fire Department.

## 2.4 Noxious and Invasive Weed Management

**Management Objective:** Arizona state law requires the control and/or eradication of weeds and the use of weed management plans as a tool for displaying compliance or intention of compliance. These legal requirements were created for the protection of land owners and real estate values of adjacent lands.

Summary of Current Conditions: Vegetation is dominated by ponderosa pine throughout the Preserve. However, Gambel oak (*Quercus gambelii*), pinyon pine (*Pinus edulis*), Arizona walnut (*Juglans major*), and many juniper species, including Alligator, one seed, and Rocky Mountain (*Juniperus deppeana*, *Juniperus monosperma*, and *Junipersus scopulorum* respectively) are present within the transition zone. Meadows are scattered through the Preserve as the soil is primarily composed of coarse cinders, which are unfavorable to the establishment of dense grasslands. There are some areas dominated by blue grama (*Bouteloua gracilis*) and squirreltail (*Elymus elymoides*). When the Preserve receives a large amount of summer precipitation, annual goldeneye (*Viguiera annua*) can be found in late summer.

The Preserve represents an opportunity for controlling infestations of one or more serious economic and environmental weed threats to Flagstaff and the surrounding area.

Current noxious infestations within the Preserve that warrant management attention are presented in Figure 4.

Scientific Name	Common Name	USDA	<b>Total Area</b>	APRS	Targeted
		Species	(acres)	Ranking	for
		Code		_	Treatment
Cirsium vulgare	Bull thistle	CIVU	1.3	2	Х
Bromus tectorum	Cheatgrass	BRTE	4.3	3	
Taraxacum officinale	Common dandelion	TAOF	2.9	3	
Verbascum thapsus	Common mullein	VETH	2.5	2	
Linaria dalmatica	Dalmatian toadflax	LIDA	5.8	3	
Centaurea diffusa	Diffuse knapweed	CEDI3	5.6	1	Х
Convulvulus arvensis	Field bindweed	COAR4	0.001	1	Х
Marrubium vulgare	Horehound	MAVU	8.3	2	Х
Bassia scoparia	Kochia	BASC5	6.7	1	Х
Erodium cicutarium	Redstem filaree	ERCI6	0.002	3	
Salsola tragus	prickly Russian thistle	SATR12	6.7	1	Х
Salsola collina	slender Russian thistle	SACO8**			
Onopordum acanthium	Scotch cottonthistle	ONAC	13.2	1	Х
Sisymbrium altissimum	Tall tumblemustard	SIAL2	1.3	2	
Tragopogon dubius	Yellow salsify	TRDU	0.7	3	
Centaurea solstitialis	Yellow star-thistle	CESO3	0.6	1	Х
Melilotus officinalis	Yellow sweetclover	MEIN2	In uplands	2	
·			only		
Total Area with	Percentage of				
Weeds Present*:	Floodplain with				
~30 acres	Weeds Present: 61%				

Figure 4: Target Invasive Species<sup>1</sup>

**Policies:** The following actions related to noxious and invasive weed management are planned.

- Eliminate noxious weeds wherever possible. When elimination is not possible, contain or limit the spread of noxious weeds.
- Routinely monitor noxious and invasive plant species within the Preserve and utilize Early Detection and Rapid Response (EDRR) to implement species-specific eradication programs if/when these species develop substantial populations.
- Coordinate with community partners regarding weed removal efforts.<sup>2</sup>
- Use biocontrol methods that target specific non-native and invasive weed species, upon express written approval of the Open Space Specialist.

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<sup>\*</sup> Total Area less than sum of individual areas due to patch overlap.

<sup>\*\*</sup>Both Salsola tragus and Salsola collina were found on the property, but will be managed identically.

<sup>&</sup>lt;sup>1</sup> Noxious Weed Management Plan, 2009

<sup>&</sup>lt;sup>2</sup> Noxious Weed Management Plan, 2009

**Planned Management Actions:** The following activities will encompass efforts leading to an integrated weed management plan for the Preserve:

- <u>Control Applications:</u> The integrated weed management strategy will incorporate active methods to control weeds within the Preserve, including application of herbicides and mechanical removal to provide short-term management. Newly germinated weeds will be eradicated by applying herbicides and using other physical control methods.<sup>3</sup> Annual species are best treated in the spring soon after their emergence, whereas perennial species may be treated later in the growing season. Mowing and early herbicide treatment will be timed to minimize seed production. Mowing will avoid archaeological sites. A long-term strategy of establishing competing vegetation, especially native grasses and shrubs, will be implemented.
- <u>Participation:</u> The many phases of integrated weed management will call upon the participation of: local agencies, adjacent land owners and land managers, leaseholders, volunteer organizations, and educational institutions.
- Monitoring for Results: Weed populations will be monitored and evaluated both pre- and post-treatment to determine success and develop future weed management strategies specific to the Preserve. Visual surveys will be conducted in the early spring and throughout the growing season to evaluate success and the need for subsequent treatments. The objective will be to reduce both the total distribution and population size of target species over the project period. Perennial and annual species will be identified separately to guide subsequent treatments.
- Monitoring for Early Detection: The Preserve has avoided infestation by several invasive weed species so far, but it is likely to see colonization events at any time. Known potential threats include tamarisk spp. (Tamarix), Russian olive (Elaeagnus angustifolia), leafy spurge (Euphorbia esula), Canadian thistle (Cirsium arvense), periwinkle spp. (Vinca), and Russian knapweed (Acroptilon repens). Weed populations will be monitored as part of the Preserve's routine maintenance function to ensure early detection of invasive weeds and rapid response.

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<sup>&</sup>lt;sup>3</sup> Herbicides planned for use within the project area include: (1) Rodeo; (2) Habitat; (3) Garlon 3A; and (4) LI700 surfactant. Additional herbicides that could be used in the upland area of the project area are: (1) Round Up; (2) Milestone; and (3) Plateau (Noxious Weed Management Plan, 2009).

## 2.5 Wildlife Resources

Management Objective: The Preserve will be managed to maintain and enhance a diversity of habitats that support native wildlife species. Emphasis will be placed on the protection of rare habitat types and special-status species.

Summary of Current Conditions: The Preserve contains a variety of geologic and vegetative characteristics, providing a unique diversity of wildlife habitats. Permanent water from the Wildcat Wastewater Treatment Plant creates important stream and wetland habitat for riparian-obligate breeding and migratory birds and waterfowl. Riparian habitats are critically important for wildlife species in the Southwest and comprise less than one percent of all land cover in Coconino County. Current wetland and riparian conditions in the Rio de Flag within Picture Canyon attract over 130 bird species, <sup>4</sup> including raptors, waterfowl, shorebirds, wading birds, and migratory songbirds. Picture Canyon provides some of the best bird-watching opportunities within the region.

The wetland and riparian conditions in Picture Canyon provide foraging habitat and hiding cover for waterfowl, shorebirds, and songbirds. These habitats have been improved via ongoing vegetation restoration efforts, including restoring riparian plants and structural complexity. Many small mammals and mesocarnivores also utilize riparian habitats. Oak woodlands and mature stands of ponderosa pine forest support substantial elk and mule deer use. The numerous decaying ponderosa pine snags in the canyon attract foraging peregrine falcons, wintering bald eagles, as well as an unusually high diversity of woodpecker species. Standing dead snags provide critical habitat for cavity nesting birds. During spring and fall migration, Picture Canyon attracts well over 100 different species of birds, including raptors, warblers, flycatchers, tanagers, sparrows, and hummingbirds. Basalt cliffs support habitat for bats, cliff-dwelling passerines, and reptiles. The uplands in Picture Canyon are also valuable to wildlife, especially the riparian zone, oak woodlands, and old-growth stands of ponderosa pine forest.

<sup>4</sup> As identified by Northern Arizona Audubon Society

Name	Common Name	FWS	USFS	BLM	State
Accipiter gentilis	Northern Goshawk	sc	s	S	wsc
Aquilegia desertorum	Mogollon Columbine	EVI 1	n salayesa		SR
Astragalus rusbyi	Rusby's Milk-vetch		S		
CH for Strix occidentalis lucida	Designated Critical Habitat for Mexican spotted owl	N.			
Clematis hirsutissima	Clustered Leather Flower		s		- 24/F010 R
Erigeron saxatilis	Rock Fleabane		S		
Eumops perotis californicus	Greater Western Bonneted Bat	sc	S	S	
Falco peregrinus anatum	American Peregrine Falcon	sc	S	S	wsc
Gymnogyps californianus	10J area for California condor				
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S	wsc
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC, BGA	S	S	wsc
Hedeoma diffusa	Flagstaff False Pennyroyal	T.	S		SR
Idionycteris phyllotis	Allen's Lappet-browed Bat	sc	S	S	
Myotis occultus	Arizona Myotis	sc		S	
Penstemon clutei	Sunset Crater Beardtongue	sc	S		SR
Phacelia serrata	Cinder Phacelía	SC			
Strix occidentalis lucida	Mexican Spotted Owl	LT			wsc
Zigadenus virescens	Green Death Camas				SR

Figure 5: Special status species occurrences/critical habitat/tribal lands within 5 miles of Picture Canyon.

**Policies:** The following policies apply to the management of wildlife resources within the Preserve.

- Actions necessary to protect endangered, threatened, or other special-status species (Figure 5), will be given high priority in the development and implementation of resource management programs.
- Public use will be managed to protect habitat and avoid adverse impacts to wildlife present on or adjacent to the Preserve. Notify Arizona State Parks if public use is restricted for the purpose of ensuring wildlife protection.
- Portions of the Preserve may be subject to temporary closure if deemed necessary for the protection of wildlife. Notify Arizona State Parks if public use is restricted for the purpose of ensuring wildlife protection.
- Picture Canyon is within game unit 11M. Hunting is prohibited within the Preserve due to its small size and the need to minimize conflicts with other recreational and educational activities.

#### **Planned Management Actions:**

- Develop and implement cooperative agreements with the Arizona Game and Fish Department when deemed appropriate for the management of wildlife resources.
- Develop and implement cooperative agreements with Northern Arizona University or other institutions as a way to establish and maintain wildlife surveys and monitoring programs within the Preserve.
- Develop and implement cooperative programs with non-governmental organizations to implement certain wildlife monitoring programs such as annual breeding bird surveys.
- Inventory wildlife before restoration activities begin and regularly complete wildlife surveys thereafter.
- Maintain, enhance, and/or restore wetlands for waterfowl, shorebirds, wading birds, songbirds, and possibly amphibians.
- Enhance the Preserve as an Arizona Watchable Wildlife Experience (AWWE) site including expanding wildlife viewing facilities.

## 3.0 Cultural Resources

**Management Objective:** The Preserve will be managed to preserve, protect, and interpret the cultural and historic resources present.

Summary of Current Conditions: The Preserve has archaeological sites that are on the National Register of Historic Places as well as resources that are not listed, but eligible, and must be protected to the same extent. On January 10, 2008 the Picture Canyon Archaeological Site (AZ I:14:346[ASM] and NA17897), located within the parcel, was placed on the National Register of Historic Places.<sup>5</sup>

The entire Preserve contains significant resources including (but not limited to) pre-historic and historical sites. Although possible Pre-Elden Phase (pre- A.D. 1150) rock art has been identified,

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<sup>&</sup>lt;sup>5</sup> In 1978, Donald E. Weaver, Jr., archaeologist and rock art expert, assigned a single site number (NA17897) to the canyon's extensive petroglyphs; however, by today's standards, the features would be considered loci within a single site, given their proximity and continuity of cultural material. Therefore, in 1998 the Arizona State Museum applied the site number AZ I:14:346 (ASM) to the entire site, including petroglyphs, habitation features, and burial features (National Register of Historic Places, Picture Canyon Archeological Site, Flagstaff, Coconino County, AZ, National Register #07001349).

the Northern Sinagua culture left the most visible evidence within Picture Canyon and other areas of the Preserve. The Northern Sinagua occupied the Flagstaff area from A.D. 600 to A.D. 1400.<sup>6</sup> Their petroglyphs gave Picture Canyon its modern name. Sinagua cave dwellings are below the canyon rim. Over 126 petroglyph panels, depicting 736 elements of archers, turtles, deer, elk, bighorn sheep, water birds, and geometric designs were made here by the Northern Sinagua (Figure 6).<sup>7</sup> Archaeologists have cited it as the type site (or first scientifically documented example) for Northern Sinagua rock art<sup>8</sup>. Throughout the parcel, there are pit houses, rock shelters, above-ground dwellings, and pottery sherds.

Excavations were conducted in 1919 and 1921 by Harold S. Colton, founder of the Museum of Northern Arizona. These ruins and features were described by Colton in a 1932 *Bureau of American Archaeology Bulletin*. During Colton's visits to Picture Canyon, his work consisted of excavating burials and stone houses. An important dwelling, Porcupine Cave, had three rooms, a plastered wall, and a door when Colton first visited in 1919 (Figure 7). It has since been disturbed by looters and a low mound of rubble is all that remains of the internal walls.

The primary ceramic group found at Picture Canyon Preserve is Alameda Brown Ware, an undecorated pottery made from volcanic clays using a technique called paddle-and-anvil. The presence of other ceramics (Tusayan Gray Ware, San Francisco Mountain Gray Ware, Little Colorado White Ware, and Tusayan White Ware) reflects trade between the Northern Sinagua and neighboring groups such as the Cohonina to the west and Kayenta to the north.

The Preserve also contains the remnants of railroad beds that were part of the Greenlaw North line responsible for carrying timber into the Greenlaw lumber mill. The line was used during timber cutting operations in 1908 and 1909 and then abandoned. The remains of a train trestle made from large virgin timber can be found slumped on the rock above the Picture Canyon waterfall (Figure 8).

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<sup>&</sup>lt;sup>6</sup> Prehistoric peoples like the Northern Sinagua were likely attracted to Picture Canyon because of the resources found there including reliable water, habitable caves and rock shelters, exploitable plant species, and proximity to arable land (National Register of Historic Places, Picture Canyon Archeological Site, Flagstaff, Coconino County, AZ, National Register #07001349).

<sup>&</sup>lt;sup>7</sup> National Register of Historic Places, Picture Canyon Archeological Site, Flagstaff, Coconino County, AZ, National Register #07001349

<sup>&</sup>lt;sup>8</sup> In addition to the Sinagua petroglyphs, Picture Canyon contains additional petroglyphs that may be of non-Sinagua origin, such as two unusually tall (40 to 46 cm) anthropomorphic figures located in Loci A and F. These figures do not resemble the rock art typically seen at Sinagua sites and their heavy weathering suggest greater age than the late Sinagua elements so prevalent at the site (National Register of Historic Places, Picture Canyon Archeological Site, Flagstaff, Coconino County, AZ, National Register #07001349).

<sup>&</sup>lt;sup>9</sup> In the first decade of the twentieth century, the Arizona Lumber & Timber Company constructed a logging railroad from its mill at Cliffs to the base of Turkey Hills. The line came to within 100 m of the southern boundary of the Preserve's archaeological site, but did not impact the prehistoric resource. Its grade can still be seen from the southwestern edge of the site (National Register of Historic Places, Picture Canyon Archeological Site, Flagstaff, Coconino County, AZ, National Register #07001349).

**Policies:** The following policies apply to the management and protection of archaeological cultural resources within the Preserve.

City Policies: Per Section 10-30.30.060 of the Flagstaff Zoning Code, whether or not any other permit or approval is required, all development within the Landmarks Overlay District (which includes Picture Canyon Natural and Cultural Preserve) requires prior approval by the Heritage Preservation Commission, and sometimes the Historic Preservation Officer. Such approvals include a Certificate of Appropriateness, a Certificate of No Effect, or a Certificate of Economic Hardship. A project-specific Cultural Resource Study (different from the Cultural Resource Survey completed by Northland Enviornmental) is required to be submitted to the Heritage Preservation Commission prior to development within the Preserve. "Development" is defined to include most improvements, including some which do not require other permits. Cultural Resource Studies address either cultural or historic resources, or both, and are accepted by the Heritage Preservation Commission, and sometimes the City of Flagstaff Historic Preservation Officer.

## 1. Impacts include:

- a. Physical destruction or damage to all or part of the resource;
- b. Alteration to all or part of the resource that is not consistent with applicable standards and guidelines;
- c. Relocation or isolation of the cultural resource from its setting;
- d. Alteration of the character of the cultural resource's setting;
- e. Introduction of visual, audible, or atmospheric elements that are out of character with the cultural resource or its setting; or
- f. Neglect of a cultural resource resulting in its deterioration or destruction. 10
- 2. Per Section 10-30.30.060 of the Flagstaff Zoning Code, an impact is not considered significant if:
  - a. It does not alter the resource; or,
  - b. It is reversible; or,

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<sup>&</sup>lt;sup>10</sup> City of Flagstaff Zoning Code, 30.30-14

- It is temporary. 11 C.
- Cultural Resource Studies for the Heritage Preservation Commission 3. formally analyze:
  - The presence or potential presence of resources; a.
  - b. The significance of known or potential resources;
  - c. The integrity of known resources;
  - d. The potential impacts of the proposed development; and
  - They propose measures to mitigate such impacts. e.
- State Policies: If an activity will impact cultural resources within designated archaeological site boundaries at the Preserve, an Arizona Antiquities Act permit, issued by the Arizona State Museum, is required per ARS 41-841 et seg.

If an activity within the Preserve involves State-level funding or a state agency (e.g. Arizona Game and Fish Department), the lead agency must formally consult with the State Historic Preservation Office per the State Historic Preservation Act.

- Federal Policies: If an activity within the Preserve involves federal funding or a federal agency (e.g. National Park Service), the lead agency must formally consult with the State Historic Preservation Office per the National Historic Preservation Act.
- Facilities and improvements will be designed to avoid conflicts with known or potential cultural resource sites based on professional cultural resources surveys of Picture Canyon. In instances where it is not feasible to completely avoid conflicts, cultural resource sites will be mitigated in accordance with the recommendations of the Arizona State Museum (per ARS 41-841 et seg.), State Historic Preservation Office (SHPO)<sup>12</sup>, the Flagstaff Zoning Code, <sup>13</sup> tribal advisors,

<sup>11</sup> Ibid

 $<sup>^{12}</sup>$  "In the event that avoidance, preservation and protection of the Register Eligible Site or Sites cannot be accomplished, purchaser shall ensure a Data Recovery Plan is developed in consultation with and acceptable to, the Arizona State Museum and the State Historic Preservation Office, or their successor agencies, and the Data Recovery is implemented and completed prior to the Register eligible Sites or Sites being affected. The artifacts and records recovered from the property shall be curated according to the Arizona State Museum (ASM) Conservation and Curation Standards as established in rules implementing the Arizona Antiquities Act. These conditions shall run with the land, and be binding on the purchaser's heirs, successors and assigns" (Cultural Resources Review for Application to Purchase State Land 53-115750-00-000, p.3).

and the working group. In situations where archaeological sites conflict with natural resources, archaeological sites take precedence in terms of maintenance and management.

• In accordance with resolution No. 2012-12 adopted by the City of Flagstaff City Council in April 2012, the City of Flagstaff will comply with applicable federal, state, and local laws, regulations, rules, standards, procedures, and guidelines governing the protection of cultural resources at the Picture Canyon Preserve. 14

## **Planned Management Actions:**

- The enforcement of applicable federal and state statutes related to the protection of cultural resources within the Preserve involves coordinating with the City of Flagstaff Heritage Preservation Commission, Arizona State Museum and State Historic Preservation Offices. Text of applicable Arizona Revised Statues are included in Appendix A.
- Receive approval from the City Heritage Preservation Commission prior to implementing construction projects as required by the inclusion of Picture Canyon in the City of Flagstaff Landmarks Overlay District.
- Documentation and Inventory: Don Weaver, Jr. and Rupestrian Cyberservices completed a summary inventory of the petroglpyhs that identified a minimum of 126 rock-art panels and 736 elements. Prior to that, Harold S. Colton assembled resources in a table form. In 2012, Northland Researched surveyed the entire Preserve for cultural resources, resulting in discovery of several new archaeological features. Ultimately, this work results in a very basic level of documentation.
- Establish baseline documentation with significant detail of surface artifacts and feature conditions using volunteers.
- Arizona Site Stewards will periodically inspect sites within the Preserve to monitor established baseline conditions as a means of tracking potential vandalism and looting.
- Complete mapping and photo-documentation of the rock art panels. For a proper report to be completed, scale drawings of the elements and panels are needed, as well as additional analysis and archival research. The report would

<sup>&</sup>lt;sup>13</sup> "The appropriate type and scope of measures varies depending on the cultural resource and impacts, and shall be recommended based on the professional expertise of the preparer and the following..." (City of Flagstaff Zoning Code, 30.30-15)

<sup>&</sup>lt;sup>14</sup> Picture Canyon Cultural Resources Resolution, p.3

be the basis for creating an interpretive program also aimed at protecting the site. Vegetation currently obscures many basalt outcrops, which probably means that additional panels/elements may yet be found. One or more field schools would provide a means of completing the panel descriptions, scale drawings, and photo-documentation with the results being curated in a public facility. Utilize Arizona Site Stewards to map current conditions to establish a baseline. Archaeological resources should be recorded under the supervision of an Arizona Antiquities Act-permitted consultant.

- Refine and update planimetric map of the prehistoric architectural features located in Locus A of the prehistoric site. Archaeological resources should be recorded under the supervision of an Arizona Antiquities Act-permitted consultant.
- Map the extent of the cultural midden associated in Locus A with the prehistoric architectural features and document to current professional standards. Archaeological resources should be recorded under the supervision of an Arizona Antiquities Act-permitted consultant.
- Tribal Outreach: Maintain ongoing government-to-government consultation about management and interpretation with official representatives of associated tribes: Hopi Tribe, Navajo Nation, Yavapai Apache Nation, Prescott Yavapai Indian Tribe, Pueblo of Zuni, Havasupai Tribe.
- Preservation and Protection: Efforts are already underway to add educational and interpretive signs, and some informal monitoring is on-going.
  - 1. Remove or control brush that may threaten fire damage to petroglyph panels.
  - 2. Integrate monitoring program utilizing Arizona Site Stewards and volunteers from the Picture Canyon Working Group.
  - Develop and install additional trail and interpretive signs as needed to designate the official trail system and communicate archaeological importance of the site. This will be completed in collaboration with interested community partners.
  - 4. Evaluate options for documentation, stabilization, and interpretation of the excavated pit house.

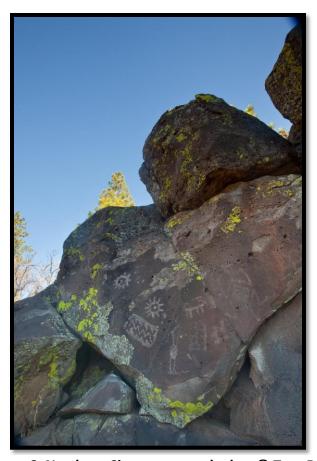


Figure 6: Northern Sinagua petroglyphs. © Tom Bean



Figure 7: Porcupine Cave. Photo credit: Rupestrian Cyberservices



Figure 8: Remains of train trestle over waterfall. Photo credit: City of Flagstaff

## 4.0 Access Management

**Management Objective:** The Preserve will be managed to ensure public access within the framework of the Arizona State Parks conservation easement. Specific objectives include:

- Designate appropriate vehicular access and parking that would have minimal resource impacts.
- Provide information to the public about the Preserve.
- Provide clearly marked trail access.
- Eliminate illegal dumping and vandalism.
- Encourage non-motorized access to the Preserve from the city and surrounding communities.
- Limit development to no more than 10%, or up to 20 acres, of the land purchased with Growing Smarter funds.
- Provide reasonable public access to the Preserve.
- Prohibit commercial or industrial uses, including mining and/or extraction of resources within the Preserve.

#### **Summary of Current Conditions:**

#### **Entrances**

- El Paso Flagstaff Road Access is from Route 66. Follow the road to the designated parking area on the right.
- North Rain Valley Road Access is from Townsend-Winona Road. Follow the road to the designated parking area.

#### Easements

- APS power line right-of-way
- El Paso Gas easement
- Pierce Water Line easement

#### Trails

- The Arizona Trail/Flagstaff Loop Trail was purchased in partnership with Coconino County. There is a 20 foot wide trail easement. It is a natural surface single track. The right-of-way is for public non-motorized access only. Modifications to the Arizona Trail will include cooperation with Coconino County staff and the Arizona Trail Association.
- User-created single track trails are common throughout the Preserve. These trails will be eliminated and only official trails will remain.

**Policies:** The following policies apply to the access management of the Preserve.

• The use of off-highway vehicles (OHVs) within the Preserve is prohibited except as may be required for emergency evacuations, forest treatments, essential administrative activities and Preserve maintenance.

#### **Planned Management Actions:**

- Designate Parking Areas: The primary parking area is on City property just north of the Treatment Plant near the Rio de Flag. The secondary parking area is at the junction of North Rain Valley Road and the Rio de Flag.
- Further Restrict Vehicular Access: There is a maze of unofficial roads and trails
  that are often unnecessary and lead to dead ends. Some of these are causing
  erosion, destroying wildlife habitat, damaging archaeological sites, and
  facilitating illegal dumping. Signs will inform the public of the need for limited
  access. A combination of natural obstructions (logs and boulders) and fencing
  will be used to control access. Official trails serve as access routes for official
  vehicle use.
- Monitoring: In collaboration with the Picture Canyon Working Group, the Open Space Specialist monitors the condition of the area on a regular basis. At least one annual volunteer maintenance day will be conducted. The Arizona Trail Association is the official steward of this section of the Arizona Trail, which involves regular monitoring and maintenance.
- Trail Construction: Two additional trails will be constructed as detailed in Figure
   The trails will include viewing areas with interpretive signs at the cultural sites and educational signs regarding the Rio de Flag restoration project at two locations: (1) the bridge; and (2) adjacent to the wetland pond on the FUTS alignment.

- 1. The Tom Moody Trail follows the perimeter of the Preserve, intersecting the Arizona Trail at the southern boundary. The southern portion of the Tom Moody Trail is a future Flagstaff Urban Trails System (FUTS) alignment. As such, the Tom Moody Trail will be upgraded to FUTS standards when funding is available. This FUTS alignment will provide a connection between the Flagstaff Mall area and Doney Park for cyclists and pedestrians.
- 2. The Don Weaver Trail follows the El Paso Gas easement and heads east along the north rim of the canyon overlooking petroglyph sites. It then follows the old Arizona Trail alignment down into the canyon and intersects the Tom Moody Trail and Arizona Trail at the bridge over the Rio de Flag.
- 3. The Locus D Trail is a planned 50 foot trail that loops away from the Tom Moody Trail to provide safe access to the petroglyphs at Locus D.

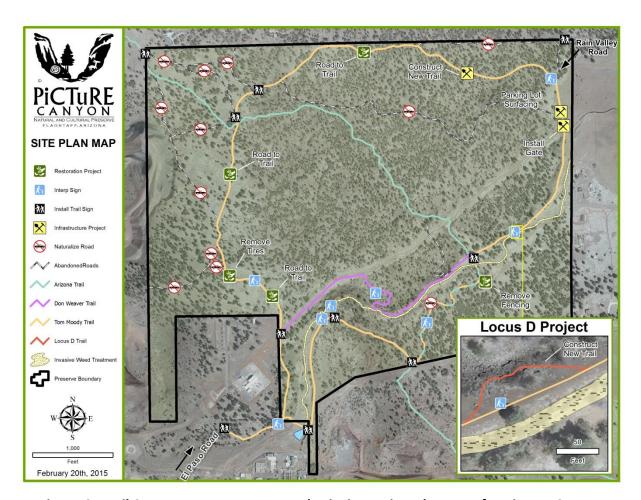


Figure 9: Trail System Improvements and Priority Action Plan Map for Picture Canyon

#### 4.1 Public Access and Recreational Use

**Management Objective:** The Preserve will be managed to ensure reasonable public access for recreational use.

**Summary of Current Conditions:** The Preserve provides a buffer between developed/developing industrial and residential lands. It serves as "neighborwoods" for the Townsend-Winona/Cosnino/Doney Park neighborhoods and connects open space east of the San Francisco Peaks with that north of Walnut Canyon and Flagstaff. <sup>15</sup>

The Preserve hosts the equestrian bypass for the Arizona Trail, which is part of the Flagstaff Loop Trail, and provides for future Flagstaff Urban Trail System (FUTS) segments that promote connectivity for non-motorized transportation and recreation. Arizona Game & Fish Department (AGFD) has identified Picture Canyon as important wildlife habitat. The Preserve includes two significant sites in the Arizona Watchable Wildlife Experience (AWWE) program. AWWE is a partnership of Arizona Game & Fish, Arizona Wildlife Federation, City of Flagstaff, Coconino County, and U.S. Forest Service. These organizations share a common vision to create and encourage public enjoyment of a designated network of watchable wildlife recreation sites in the greater Flagstaff area, each with integrated educational materials to highlight the unique physical, biological, and cultural site values. Given its proximity to Flagstaff, Picture Canyon receives high levels of coordinated visitation for numerous recreation, education, and research-based activities.

**Policies:** The following policies apply to the management of recreation activities within the Preserve.

- Recreational activities that will result in damage to the Preserve or its archaeological/cultural resources are not permitted. Large scale special events are not compatible with the Preserve. Permission from the Open Space Specialist must be obtained prior to installing geocaches in the Preserve.
- Portions of the Preserve may be closed to recreational activity if deemed necessary for the protection of wildlife populations or cultural resources, as consistent with reasonable public access as required by the Arizona State Parks conservation easement. Notify Arizona State Parks if any temporary closures occur.
- Applicable leash laws and regulations will be enforced within the Preserve.<sup>16</sup>

<sup>&</sup>lt;sup>15</sup> Neighborwoods is a term used in the Flagstaff Area Open Spaces and Greenways Plan that refers to undeveloped areas near neighborhoods which act as a buffer and provide opportunities for recreation and relaxation.

<sup>&</sup>lt;sup>16</sup> Flagstaff City Code, Section 6-02-001-0001

• Camping and fuelwood collection are prohibited within the Preserve.

## **Planned Management Actions:**

- Regularly monitor and maintain recreational trails and use areas for hiking, biking, and equine recreation.
  - 1. Continue partnerships to sign, maintain, and manage trails.
  - 2. Encourage collaborative processes to respect the needs of all user groups.
- Obtain current data regarding non-motorized trail users to understand trail use trends and prioritize high-use trail monitoring and maintenance efforts.
  - 1. Involve trail user groups as partners in survey development and on-the-ground data collection.
- Address trail system safety and maintenance needs.
  - 1. Expand the Adopt-A-FUTS program to encourage volunteer assistance with trail maintenance.
  - 2. Replace existing trail bridge over the Rio de Flag with bridge that meets Flagstaff Urban Trails System standards.
  - 3. Complete trail segment shown as Locus D in Figure 9.

## 4.2 Education and Research

**Management Objective:** The Preserve will be managed to ensure public access to the site for education and research.

**Summary of Current Conditions:** Since the 1980s, Picture Canyon has been an outdoor classroom for students in northern Arizona. The abundance of archaeological sites has provided extensive cultural educational opportunities. The presence of the Rio de Flag's permanent flow serves as an education site to study riparian habitats and watershed issues. The Preserve is part of the Centennial Forest and is used by the Northern Arizona University School of Forestry for a long-range living classroom.

**Policies:** The following policies apply to the management of educational activities and research within the Preserve.

- Educational or research activities that may result in damage to ecological, cultural, or archaeological resources are prohibited. A permit must be submitted and approved by the Open Space Specialist for activities that may alter the ecological, cultural, or archaeological resources.
- Portions of the Preserve may be closed to educational or research activities if deemed necessary for the protection of wildlife populations or cultural resources.

## **Planned Management Actions:**

- Provide educational and interpretive activities about wildlife, natural environment and safety.
  - 1. Present age-appropriate workshops and educational programs for youth.
  - 2. Develop educational materials within the Preserve.
  - 3. Partner with schools and youth organizations to sponsor educational programs.
- Include Northern Arizona University and other educational institutions in monitoring and research efforts within the Preserve, when appropriate.
- Monitor and document educational and research activities occurring within the Preserve as a means of tracking visitor use to prevent ecological, archaeological, or cultural disturbance.

## **4.3 Facility Development**

**Management Objective:** The Preserve will be managed with facilities that enhance public access to the site while maintaining the requirements of Arizona State Parks conservation easement, included as Appendix 4-D.

**Summary of Current Conditions:** A segment of the Arizona Trail, traveling north to south through the Preserve, intersects an existing segment of the FUTS. Two smaller trails currently serve as temporary access to archaeological sites and visual resources. A parking area located at the southwest entrance of The Preserve provides limited vehicle parking. An additional parking area accessible from Townsend Winona provides limited vehicle parking at the northeast entrance to the Preserve. Fencing around the Rio de Flag restoration area is also present within the Preserve.

**Policies:** The following policies apply to the construction of new facilities and site improvements.

- New facilities will be designed to minimize the visual impact of these improvements on the Preserve site. When appropriate, land areas previously disturbed will be utilized for the construction of new facilities.
- Except as provided in Section 10-30.30.020.B of the Flagstaff Zoning Code, within a Historic Overlay Zone, whether or not any other approval or permit is required, all proposed work, including demolition, shall be approved by the Heritage Preservation Commission<sup>17</sup>.
- Except as provided in Section 10-30.30.030.B of the Flagstaff Zoning Code, prior to the granting of any other required approvals or permits and prior to the commencement of any work, the Heritage Preservation Commission shall review all work proposed and shall approve or conditionally approve the work in the form of a Certificate of No Effect, Certificate of Appropriateness, or Certificate of Economic Hardship (Please refer to section 10-30.30.060 of the Flagstaff Zoning Code for more information pertaining to the approval of work within a Historic Overlay Zone)<sup>18</sup>.
- Open Space Specialist will obtain advanced written permission from Arizona State Parks to construct any trail, road, parking lot, ramada, or staging area.
- No signs, billboards, awnings or advertisements shall be displayed or placed on the Property, except for appropriate and customary signs for interpretive and recreational purposes, such as "no trespassing" signs and trail markers, and then only with advance written permission from Arizona State Parks.

Planned Actions: The following actions related to the development of new facilities at the Preserve are planned. The following actions were researched and outlined by the Picture Canyon Working Group prior to the City of Flagstaff's acquisition of the Preserve.

Construct the Don Weaver Educational Interpretive Trail: The purpose of this new trail is to provide the public with a trail for nature viewing and viewing select petroglyphs. The trail will be properly designed to minimize erosion, and avoid sensitive areas. Unnecessary and inappropriate trails would then be obliterated. Signs will educate the public on the unique natural and cultural resources along the trail.

<sup>&</sup>lt;sup>17</sup> City of Flagstaff Zoning Code, 2011

<sup>&</sup>lt;sup>18</sup> Ibid

- Construct the Tom Moody Recreational Loop Trail. The purpose of this trail is to provide a path around the perimeter of the Preserve. The trail will be properly designed to minimize erosion, and avoid sensitive areas. Unnecessary and inappropriate trails would then be obliterated. Signs will educate the public on the unique natural and cultural resources along the trail.
- Signs: Four welcome kiosks will be installed at the access points to the Preserve including the two parking areas and locations where the Arizona Trail enters the Preserve. These entry signs will provide information to the public that includes land ownership, permitted activities, and regulations. Additional signs as mentioned above will include regulatory signs and interpretive signs along the trails. Wayfinding signs will be installed along Route 66 and Townsend Winona Road to assist in locating access to the Preserve.
- Designated Parking Areas: There are two designated trailheads with parking areas. This will help prevent further resource degradation and the proliferation of roads and trails.

## 5.0 Priority Action Plan

**Introduction:** Provided below is a summary of priority actions that will be taken related to the expansion, development, and management of the Preserve. It is anticipated that this priority action plan will be updated every two years. The biannual review will be conducted in advance of the City of Flagstaff's budget development process. Modifications to the plan will be made to reflect existing conditions at the time of each update.

## **Priority Action Plan – Facility Development:**

Action:	Responsibility:	Implementation Date:
Construct Don Weaver Trail for nature and cultural resource viewing.	City of Flagstaff	Summer – Fall 2016
Decommission extraneous trails and roads not designated as part of planned trail system.	City of Flagstaff	Spring – Fall 2016
Complete trailhead at the junction of North Rain Valley Road and the Rio de Flag.	City of Flagstaff	Summer 2016
Install two entry signs, one at the junction of North Rain Valley Road and the Rio de Flag and the other north of the Treatment Plant.	City of Flagstaff	Spring 2016
Install wayfinding sign on Townsend Winona Road.	City of Flagstaff	Spring 2016
Design and install interpretive signs at outdoor classroom and along trails.	City of Flagstaff	Fall 2015

Design and install trail signs throughout Preserve.	City of Flagstaff	Winter 2016
Area monitoring and trail maintenance.	City of Flagstaff	On-going/monthly
Upgrade Tom Moody Trail to Flagstaff Urban Trails System standards.	City of Flagstaff	2023 – 2025
Replace existing trail bridge over the Rio de Flag with bridge that meets Flagstaff Urban Trails System standards.	City of Flagstaff	2023 – 2025
Construct archaeological site viewing trail around Locus D to reduce existing impacts of emerging social trails.	National Park Service – Flagstaff Area Monuments and City of Flagstaff	Summer 2016

# **Priority Action Plan – Resource Management Plan:**

Action:	Responsibility:	Implementation Date:
Conduct stream flow monitoring in the Rio de Flag and Picture Canyon.	Water Resources Specialist	On-going
Conduct in-field water quality testing/monitoring in the Rio de Flag and Picture Canyon.	City of Flagstaff	On-going
Conduct sampling and laboratory analysis of water quality in the Rio de Flag and Picture Canyon.	City of Flagstaff	On-going

Develop and maintain plant species observation database.	Northern Arizona Plant Society	On-going
Conduct noxious plant surveys and maintain map of occurrence locations.	City of Flagstaff	On-going
Update photo-monitoring program with new photographs from established monitoring stations.	City of Flagstaff	Annual
Treat invasive weeds throughout Preserve.	City of Flagstaff	Annual
Develop and maintain animal species observation database.	City of Flagstaff with AGFD and volunteers	On-going
Conduct breeding and migratory bird surveys.	Volunteers with oversight by Northern Arizona Audubon	Annual
Conduct mammal surveys including game and nongame species.	AGFD with volunteer assistance	Annual
Conduct reptile and amphibian surveys.	AGFD with volunteer assistance	Annual
Treat forest resources to improve forest health.	Flagstaff Fire Department	On-going
Establish cultural resource intensive baseline.	City of Flagstaff, Picture Canyon Working Group, Site Stewards	Spring – Fall 2016

# **Priority Action Plan – Partnerships:**

Action:	Responsibility:	Implementation Date:
Establish formal Volunteer/Docent Program at the Preserve	City of Flagstaff	Spring 2016
Implement Site Stewards Program and actively recruit volunteers	City of Flagstaff	Spring 2016
Confirm existing agreements and/or establish new agreements with AGFD regarding annual mammal and reptile/amphibian surveys	City of Flagstaff	Spring 2016
Conduct meeting with Northern Arizona University representatives regarding on-site natural resource research work	City of Flagstaff	Annual
Establish informal agreements with private organizations and volunteer groups related to annual bird surveys	City of Flagstaff	Update/renew annually
Document rock art and other cultural resources (especially architecture and midden deposits) at Locus A, and develop and implement monitoring program.	Picture Canyon Working Group	Summer 2016

## **APPENDIX A: Applicable Arizona Revised Statutes**

**Note:** These state statutes are administered by the Arizona State Museum and rules implementing these statutes also apply, for example, projects at Picture Canyon Natural and Cultural Preserve often require obtaining a Project Specific Permit from the Arizona State Museum. It is the responsibility of the City to comply with these statutes while managing the Preserve. Questions regarding the statutes can be directed to the Arizona State Museum at (502)621-4795.

#### ARS 41-843: Prohibiting unnecessary defacing of site or object

"No person, institution or corporation shall deface or otherwise alter any site or object embraced within the terms of sections 41-841 and 41-84, except in the course of activities pursued under the authority of a permit granted by the director of the Arizona state museum."

#### ARS 41-844: Duty to report discoveries; disposition of discovers; definitions

"A. A person in charge of any survey, excavation, construction or other like activity on any lands owned or controlled by this state, by any public agency or institution of the state, or by any county or municipal corporation within the state shall report promptly to the director of the Arizona state museum the existence of any archaeological, paleontological or historical site or object that is at least fifty years old and that is discovered in the course of such survey, excavation, construction or other like activity and, in consultation with the director, shall immediately take all reasonable steps to secure and maintain its preservation. If it is necessary to move the object before completion of the proceedings prescribed by this section to permit the continuation of work on a construction project or similar project, the director shall require that the move be accomplished in the manner that will least disturb and best preserve the object.

B. If the objects discovered are human remains, funerary objects, sacred ceremonial objects or objects of national or tribal patrimony, the director of the Arizona state museum shall, to the best of his ability, give notice of the discovery to:

- 1. All individuals that may have a direct kinship relationship to the human remains.
- 2. All groups that it is reasonable to believe may have a cultural or religious affinity to the remains or objects.
- 3. Appropriate members of the curatorial staff of the Arizona state museum.
- 4. Faculty members of the state universities who have a significant scholarly interest in the remains or objects.
- 5. The state historic preservation officer.
- C. American Indian tribal governments that wish to be notified pursuant to this section shall keep on file with the director lists of the cultural groups and geographical area with which they claim affinity.
- D. If American Indian human remains, funerary objects, sacred ceremonial objects or objects of cultural patrimony are involved, the director, in addition to giving notice as required in subsection B, shall give notice to the tribes that occupy or have occupied the land on which the discovery is made and to the Arizona commission on Indian affairs and the intertribal council of Arizona.
- E. The director shall respond to every report of a discovery in a timely fashion and within six months of being notified of the discovery, the director shall convene a meeting of notified persons and representatives of notified groups to discuss the most appropriate disposition of the discovered materials. At this meeting, the director shall encourage agreement among all participants regarding the most appropriate disposition and treatment of the materials. An agreement may include a decision to

curate or rebury materials subject to conditions or limitations, a decision to engage in scientific analysis before repatriation or reburial or any other appropriate disposition. If an agreement is reached, it shall determine the disposition and treatment of the materials and the director shall oversee its implementation.

F. If no agreement is reached within six months of the meeting required by subsection E, the human remains or funerary objects shall be disposed and treated in accordance with the wishes of the nearest relative with a direct kinship relationship, or with the wishes of the governing body of the group with cultural or religious affinity to the remains or objects if no relative exists. If sacred ceremonial objects or objects of national or tribal patrimony are concerned, disposition and treatment shall be in accordance with the wishes of the governing body of the group with cultural or religious affinity to the objects. The authority to determine the disposition and treatment of remains or objects pursuant to this subsection shall not be exercised in a manner that would prevent timely completion of a construction project or other project.

G. If there is no person with a direct kinship relationship or a group with a cultural or religious affinity to human remains or funerary objects and the remains have no scientific value, the remains or funerary objects shall remain undisturbed. If it is necessary to move them in order to permit completion of a construction or similar project, the remains or funerary objects shall be reburied under the supervision of the director in a place as similar and close as possible to their original burial site. If the remains or funerary objects have scientific value, they may be curated by the Arizona state museum or other authorized repository for a period of one year, after which they shall be reinterred. If remains of American Indians are involved, reburial pursuant to this subsection shall be undertaken with the cooperation of the Indian tribe located nearest to the place where the remains were discovered. Reburial may, with that tribe's consent, take place on that tribe's reservation. The one-year period for scientific curation may be extended with that tribe's consent. If there is no group with a cultural or religious affinity to sacred ceremonial objects or objects of national or tribal patrimony, the director shall decide on the most appropriate disposition and treatment. Where American Indian materials are involved, the determination shall be made in consultation with appropriate tribal representatives.

H. A repository charged with the care or custody of human remains, funerary objects, sacred ceremonial objects or objects of national or tribal patrimony pursuant to this section shall maintain them with appropriate dignity and respect and with consideration for the specific applicable cultural or religious traditions applicable to the remains or objects. When materials are returned to relatives or affiliated groups, the relatives or groups shall accept and undertake responsibility for the protection and security of the materials.

- I. The expense of any curation or reburial pursuant to this section that is required as the result of a construction project or similar project shall be borne by that project. Reburials made in order to satisfy the wishes of a relative or affinal group shall be by and at the expense of the relative or group.
- J. If a person believes that the provisions of this section have not been properly applied he shall give written notice of this claim to all other parties entitled to notice under subsections B and C. The parties shall meet within fifteen days of receiving the notice and attempt to agree on the designation of a third party to assist in the resolution of the dispute. If the parties cannot agree within fifteen days on a third party, the state historic preservation officer shall serve in that capacity. The adverse parties shall attempt to reach a resolution with the assistance of the third party. If a resolution cannot be reached within ninety days of the designation of the third party, the third party shall resolve the dispute. Either party may appeal a decision within thirty days to the superior court in the county in which the subject of the dispute is located.

K. If a written request for the reburial or repatriation of human remains, funerary objects, sacred ceremonial objects or objects of national or tribal patrimony in the possession and ownership or control of an agency of this state, as of the effective date of this section, is made by the government of an

American Indian tribe, the requirements of this section apply as if the remains or objects had been discovered after the effective date of this section.

L. Whenever two or more groups or tribes have affinity to the same human remains, funerary object, sacred ceremonial object or object of national or tribal patrimony and they do not agree on the disposition or treatment of such remains or object, the question of which group or tribe shall be deemed to have affinity shall be resolved pursuant to subsection J. In making the determination, consideration shall be given to all the relevant evidence of affinity.

#### M. For the purposes of this section:

- 1. "Funerary object" means an object discovered in proximity to human remains and intentionally buried or interred with the remains.
- 2. "Group with a cultural or religious affinity" means any of the following:
  - (a) In the case of human remains or funerary objects, any tribe that has submitted a written claim of affinity pursuant to subsection C or any other group or tribe that has cultural affinity in light of all the relevant evidence.
  - (b) In the case of a sacred ceremonial object, a group whose religious observances traditionally have utilized such object.
  - (c) In the case of an object of national or tribal patrimony, a group whose past or present government or traditional cultural organization was or is associated with the object.
- 3. "Group" includes American Indian tribes.
- 4. "Human remains" means any remains of a human being who died more than fifty years before the remains are discovered.
- 5. "Objects of national or tribal patrimony" means inalienable items of historical or cultural significance to tribal groups.
- 6. "Sacred ceremonial object" means an object traditionally utilized in religious observances.
- 7. "Tribe" means any federally recognized tribal government."

APPENDIX B: Arizona State Parks Conservation Easement